AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (previously presented) An implant comprising a metallic main body, which is optionally covered with one or more intermediate layers, and additionally comprising a coating applied thereto to increase the tissue compatibility,
wherein the coating comprises a polysaccharide layer made of

   (a) chitosan and
   (b) hyaluronic acid and/or hyaluronic acid derivatives,

   and wherein the chitosan is present at least in partial areas or partial layers, and further wherein the polysaccharide layer has a composition such that the in vivo degradation of the polysaccharide layer is slowed from the outside in the direction of the main body of the implant, and wherein a degradation rate of the polysaccharide layer is adjusted by crosslinking the hyaluronic acid and/or hyaluronic acid derivatives with a reagent selected from the group consisting of formaldehyde, glutaraldehyde, divinyl sulfone, polyaldehydes, carbodiimides, epichlorohydrin, ethylene glycol diglycidyl ether, butane diol diglycidyl ether, polyglycerol polyglycidyl ether, polyethylene glycol diglycidyl ether, polypropylene glycol diglycidyl ether, or bis or polyepoxy cross-linking agents.

2. (cancelled)

3. (previously presented) The implant according to claim 1, wherein the polysaccharide layer comprises an adhesion-promoting layer made of chitosan.

4. (previously presented) The implant according to claim 3, wherein the adhesion-promoting layer is 0.1 to 50 μm thick.

5. (previously presented) The implant according to claim 1, wherein a component of the chitosan in the total weight of the polysaccharide layer is not more than 50 weight-percent.

6. (previously presented) The implant according to claim 1, wherein the hyaluronic acid and hyaluronic acid derivatives have an average molecular weight between 300,000 and 500,000 Dalton after sterilization of the implant.

7. (previously presented) The implant according to claim 6, wherein the average molecular weight is between 380,000 and 420,000 Dalton.

8. (cancelled)

9. (previously presented) The implant according to claim 1, wherein an internal area of the polysaccharide layer is not degradable, at least completely, within two years.

10. (previously presented) The implant according to claim 9, wherein the internal area is 3 to 50 μm thick.

11. (previously presented) The implant according to claim 1, wherein an external area of the polysaccharide layer is degradable in vivo within 100 days.

12. (previously presented) The implant according to claim 11, wherein the external area is 10 to 250 μm thick.

13. (previously presented) An implant comprising a metallic main body, which is optionally covered with one or more intermediate layers, and additionally comprising a coating applied thereto to increase the tissue compatibility,
wherein the coating comprises a polysaccharide layer made of

(a) chitosan and
(b) hyaluronic acid and/or hyaluronic acid derivatives,

and wherein the polysaccharide layer has a composition such that the in vivo degradation of the polysaccharide layer is slowed from the outside in the direction of the main body of the implant, wherein the polysaccharide layer comprises at least two partial layers having different degradation behaviors, the degradation behavior within each partial layer being able to be fixed continuously changeably or constant over the partial layer and wherein a degradation rate of the polysaccharide layer is adjusted by

crosslinking the hyaluronic acid and/or hyaluronic acid derivatives with a reagent selected from the group consisting of formaldehyde, glutaraldehyde, divinyl sulfone, polyaldehydes, carbodiimides, epichlorohydrin, ethylene glycol diglycidyl ether, butane diol diglycidyl ether, polyglycerol polyglycidyl ether, polyethylene glycol diglycidyl ether, polypropylene glycol diglycidyl ether, or bis or polyepoxy cross-linking agents.

14. (previously presented) The implant according to claim 13, wherein the polysaccharide layer comprises an internal partial layer which is degradable by not more than 20 weight-percent in vivo within 2 years.

15. (previously presented) The implant according to claim 14, wherein the internal partial layer is 3 to 50 μm thick.

16. (previously presented) The implant according to claim 13, wherein the polysaccharide layer comprises an external partial layer which is degradable by at least more than 50 weight-percent within 100 days in vivo.

17. (previously presented) The implant according to claim 16, wherein the external partial layer is 10 to 250 μm thick.

18. (previously presented) The implant according to claim 1, wherein a layer thickness of the polysaccharide layer is between 10-400 μm.

19. (previously presented) The implant according to claim 18, wherein the layer thickness is 50-120 μm.

20. (previously presented) The implant according to claim 1, wherein the hyaluronic acid, the hyaluronic acid derivatives, and the chitosan are components of the polysaccharide layer as individual substances, copolymers, or block polymers made of hyaluronic acid, hyaluronic acid derivatives, and chitosan, or in the form of mixtures of the above-mentioned individual substances.

21. (previously presented) The implant according to claim 1, wherein the polysaccharide layer is immobilized covalently or through physisorption on the implant.

22-23. (cancelled)

24. (previously presented) The implant according to claim 1, wherein the implant is an endovascular implant.

25. (previously presented) The implant according to claim 1, wherein the implant is an implantable tissue stimulator.

26. (new) The implant according to claim 1, wherein the degradation rate of the polysaccharide layer changes at a steady rate from the outer portion of the coating toward the main body.

27. (new) The implant according to claim 1, wherein the polysaccharide layer comprises at least two partial layers having different degradation rates.